

PROJECT SUMMARY

One-Pg
Summary

DEP Growing Greener Grant
Grant/Project #SC160149
Jackson Township

Project Description

An approximately 825 linear feet of the unnamed tributary to Codorus Creek was restored by removing legacy sediment and restoring the floodplain to historic elevations. This included reconnecting the stream channel with the floodplain, creating wetland bench treatment areas, and the establishment of native plant communities focusing on riparian buffer restoration using native trees, shrubs, and grasses. The existing bridges were removed and two new pedestrian boardwalk crossings will be added.

Project Goals

The purpose of this project was to remove legacy sediment and restore the floodplain of an unnamed tributary to Codorus Creek to conditions that resemble as close of an approximation to pre-settlement conditions as is reasonably possible. This would remove a substantial sediment and nutrient source from the Codorus Creek Watershed. It was also anticipated that this project would act as a sediment and nutrient sink to remove and process nutrients supplied by the upstream watershed, providing systemic ecological uplift. Jackson Township intends for this restoration project to provide recreational and educational opportunities for the community.

Project Results

Load Reduction Method	N (lbs)	P (lbs)	Sediment (tons)
Protocol #1	114.9	15.0	31.9
Protocol #2	165.5	0.0	0.0
Protocol #3	48.6	2.3	0.4
Total Annual Removal	329.0	17.3	32.3

*Based on the Recommendations of the Expert Panel to Define Removal Rates for individual Stream restoration Projects (Sept. 2014)

Pictures



Before – Overview of site from PA-116 bridge



After – Downstream from upstream extents at sewer right-of-way



PROJECT SUMMARY

Project Costs

Budget request:	\$190,000.00
Township Match (15% Min. Req.):	\$28,500.00
Total:	\$218,500.00

Spending included:	
Municipally Contracted Work:	\$211,915.85
Construction Design Services:	\$36,848.09
Total:	\$248,763.94

Total Spending:	\$248,763.94
Grant Amount:	<u>-\$190,000.00</u>
Actual Township Match (30.9% of Grant)	\$58,763.94

Lessons Learned

The historical floodplain soils at the target design elevation were irregular and rock pinnacles were encountered in the subgrade that had not been identified by the design site investigations. The contractor and designer worked closely together to identify minor adjustments to successfully implement the project as designed.

Partners

- Jackson Township
- C.S. Davidson, Inc.
- LandStudies, Inc.
- Ecotone, Inc.

Contact Information

Owner:

Jackson Township
William Conn, Township Manager
439 Roth's Church Road
Spring Grove, PA 17362

Engineer:

C.S. Davidson, Inc.
Jeffrey Shue, P.E.
38 North Duke Street
York, PA 17401

Designer:

LandStudies, Inc.
Benjamin Ehrhart, P.E.
315 North Street
Lititz, PA 17543

Contractor:

Ecotone, Inc.
Chris Kidd
129 Industry Lane
Forest Hill, MD 21050